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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

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EXAMINER

MADSEN, ROBERT A

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,622

Applicant(s)

KOWALSKI, WILLIAM R.

Examiner

Robert Madsen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-11,13,14,17,18,20,24 and 103-109 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,9-11,13,14,17,18,20,24 and 103-109 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The Amendment filed February 24, 2005 has been entered. Claims 103-109 have been added. Claims 5,12,15,16,19,21-23 and 25-102 have been cancelled. Claims 1-4,6-11,13,14,17,18,20,24,103-109 remain pending.

2. Applicant elected the following species/subspecies for examination: fish-type seafood, natural respiratory/circulatory method, and a liquid solvent in Reply filed April 26, 2004.

Claim Objections

3. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 recites introducing a treatment gas, wherein the introducing step is performed using partially purified smoke. Claim 8 recites wherein the introducing step is performed using a gas that contains carbon monoxide. One could infringe on claim 8 without infringing on claim 1, by introducing pure CO.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 1-4,6-7,9-11,13,14,17,18,20,24,103-109 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

6. With respect to claims 1-4,6-7,9-11,13,14,17, 20,24,106-109, the amendment includes the new limitation of introducing either partially purified smoke wherein the animals membranes act to super-purify. However, the originally filed disclosure did not describe purifying partially purified smoke or a gas derived from raw smoke via the animal's membranes *only*. The originally filed disclosure was directed to combination of water *and* animal membranes for purification (e.g. claim 18 and page 16 of the specification: "filtering and purifying that occurs *when* partially purified smoke passes through water *and* the membranes of whole fish"), and does not describe purification of smoke material without passing through water.

7. Additionally, with respect to claims 1,3,6,7,10,11,13, 17,18,20,104,106,108 in particular, it is noted that the amended generic claims, as well as claims depending from the generic claims, are broad enough to read on dead animals because they do not recite a live animal or an introducing step that includes inhaling or respiring. Although the claims were and will continue to be examined in light of the particular species/sub-species elected, these claims also fail to comply with the enablement because the originally filed disclosure did not describe or even suggest the use of water and membranes for purification of a smoke material in a dead animal (i.e. without

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inhaling or respiring) . The specification discloses “filtering and purifying that occurs *when* partially purified smoke passes through water *and* the membranes of whole fish” (page 16). Given that no explanation was provided in specification of *how* the water and membranes serve as filters, one must assume that this disclose is only enabling for *living, water-breathing animals* only because purified/filtered gases enter living fish by passing through water and the gills of the fish(i.e. membranes).

8. Regarding claim 3, the introduction step presumably is the “exposing” step and assuming that the fluid contains partially purified smoke, there is no support for this “fluid”. The specification discloses “partially purified smoke passes through water and the membranes of whole fish”, not “ a fluid containing partially purified smoke”.

9. Regarding claims 4 , 105, and 109,the introduction step includes introducing a dissolved treatment gas in a liquid, and the introducing step is performed using partially purified smoke, as recited in claim 4, or a gas derived from raw smoke, as recited in claims 105 and 109. There is originally filed specification did not describe first dissolving partially purified smoke in a “liquid” before the smoke is introduced to the circulatory system. The specification discloses that partially purified smoke *passes through water* , not *dissolving* the gas derived from smoke/partially-purified smoke in a *liquid*, or even water.

10. Regarding claim 103 and 107, there is no support for inhaling a “treatment fluid” wherein the introducing step is performed using gas derived from raw smoke and wherein water and animal’s membranes act to super-purify. The specification discloses “partially purified smoke passes through water and the membranes of whole fish”.

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There is no disclosure for using "treatment fluid" including a gas derived from raw smoke.

11. Regarding claim 104 and 108, there is no support for exposing the respiratory system to a *fluid* containing gaseous smoke using a gas derived from raw smoke wherein water and animal's membranes act to super-purify. The specification discloses "partially purified smoke passes through water and the membranes of whole fish".

There is no disclosure for using a "fluid" containing a gas derived from raw smoke.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 2,3,4,103-105,107,108,109 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Regarding claims 2,3,103,104,107,108 these claims recite the limitation "said introducing step" , but there is no introducing step in the claims. Thus, there is insufficient antecedent basis for the "introducing step" limitation in the claims and it is not clear when the introducing step occurs. For examination purposes only, inhale steps or exposing steps are understood to be introduction steps.

15. Regarding claim 2, assuming the introduction step is the "inhale" step , it is not clear if the treatment fluid *is* a liquid or a gas and if the fluid *comprises* the smoke or *is* the smoke.

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16. Regarding claim 3, assuming the "exposing" step is the introduction step, it is not clear whether the "fluid containing gaseous smoke" *is* partially purified smoke or if the fluid *comprises* partially purified smoke.

17. Regarding claims 4, 105, and 109 it is not clear if the dissolved treatment gas *is* or *comprises* partially purified smoke.

18. Regarding claims 103 and 107, assuming the "inhale step" is the introduction step, it is not clear if the treatment fluid *is* or *comprises* partially purified smoke.

19. Regarding claim 104 and 108, assuming the "exposing step" is the introduction step, it is not clear if the fluid containing gaseous smoke *is* or *comprises* a gas derived from raw smoke.

Claim Rejections - 35 USC § 102

20. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21. Claims 1, 4, 6, 7, 9-14, 18, 105, 106, 109 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaoka et al. (JP 09-149761 A).

22. Yamaoka et al. teach injecting a gas derived from raw smoke or partially purified smoke (Paragraph 22 of English translation) that is dissolved/dispersed in water, into a live tuna so that the smoke is processed by the circulatory system and heart

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(Paragraphs 24 and 25), as recited in claims 10-14, and diffuses to all corners of the body, thereby providing the color and the taste of the fresh fish (Paragraphs 2-7, 12-13, 15, 62, 63). Consequently, the smoke must super-purified by the water and/or membranes since it is processed through the fish via water and diffuses through the body, but does not negatively affect the taste of fresh fish, as recited in claims 1, 4, 18, 105, 106, and 109, and respiratory system would be introduced to or exposed to the smoke, as further recited in claims 1, 18, because it is processed by the heart and circulatory system and diffuses through the entire fish. Yamaoka et al. further teaches the fish is also frozen as recited in claims 6 and 7 (Paragraph 12). Furthermore, the introduction of gas kills the fish (i.e. it is injected into a blood vessel and forced through the heart/bloodstream) as recited in claim 9.

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claims 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. (JP 09-149761 A) as applied to claims 1, 4, 6, 7, 9-14, 18, 105, 106, 109 above, further in view of Iimura (JP61141835A) and Kowalski (US 5972401).

25. Yamaoka et al. teach preserving the color and taste of tuna by introducing water entrained with partially purified smoke through both respiratory and circulatory systems

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of a live tuna to diffuse the smoke over the entire fish, but Yamaoka et al. are silent in teaching the water with the smoke inspires during ventilating, as recited in claim 24, and applying by mass treatment as recited in claim 17.

26. limura also teaches preserving the color and taste of tuna by introducing water entrained with a gas through the respiratory and circulatory system of a live tuna that diffuses over the entire fish. However, limura teaches introducing the gas and water via inspiring during ventilating so the gas will be transported to the ends of the blood vessels and dispersed throughout the fish (Page 2 and Constitution of the invention on page 3 of English translation provided by Applicant), as recited in claim 24.

27. Therefore, it would have been obvious to modify Yamaoka et al. and supply the water with the smoke in the tank such that the smoke inspires during ventilating, since limura teaches gas supplied to the water tank holding a fish will be transported to the ends of the blood vessels and dispersed throughout the body via ventilating for preserving the color and texture of the fish and this would offer an improvement over the procedure of Yamaoka et al. since this would eliminate the injection step required by Yamaoka et al. which requires located a desired location on the fish for injection. One would have been substituting one method of introducing a gas into the blood stream of an alive fish for another for the same purpose: will be transported to the ends of the blood vessels and dispersed throughout the body. It would have been further obvious to treat more than 1 fish at a time given that smoke would be introduced into the tank and separate needles for each fish would not be required.

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28. Claims 2,103,and 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. (JP 09-149761 A) in view of limura (JP61141835A).

29. Yamaoka et al. teach injecting a gas derived from raw smoke or partially purified smoke (Paragraph 22 of English translation) that is dissolved/dispersed in water, into a live tuna so that the smoke is processed by the circulatory system and heart (Paragraphs 24 and 25), and diffuses to all corners of the body, thereby providing the color and the taste of the fresh fish(Paragraphs 2-7, 12-13,15,62,63). Consequently, the smoke must super-purified by the water and/or membranes since it is processed through the fish via water and diffuses through the body, but does not affect negatively affect the taste of fresh fish, and respiratory system would be introduced to or exposed to the smoke because it is processed by the heart and circulatory system and diffuses through the entire fish. However, although Yamaoka et al. teaches the water/gas dispersion diffuses into the blood , Yamaoka et al. are silent in teaching the animal inhales the water/gas dispersion, or treatment fluid.

30. limura also teaches preserving the color and taste of tuna by introducing water entrained with a gas through the respiratory and circulatory system of a live tuna that diffuses over the entire fish. However, limura teaches introducing the gas to a water tank holding the fish so that the fish inhales the gas containing water so the gas/water dispersion will be transported to the ends of the blood vessels and dispersed throughout the fish (Page 2 and Constitution of the invention on page 3 of English translation provided by Applicant). Therefore, it would have been obvious to modify Yamaoka et al. and have the animal inhale the water/gas dispersion, or treatment fluid, since limura

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teaches gas supplied to a water tank holding a fish will be transported to the ends of the blood vessels and dispersed throughout the body as required by Yamaoka et al. and this would offer improvements over the procedure of Yamaoka et al. in that (1) more than 1 fish can be treated at a time and (2) locating a desired location on the fish for injection is not required. One would have been substituting one method of introducing a gas into the blood stream of an alive fish for another for the same purpose: will be transported to the ends of the blood vessels and dispersed throughout the body.

31. Claims 3,104, 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. (JP 09-149761 A) evidenced by Kowalski (US 5972401) in view of Iimura (JP61141835A).

32. Yamaoka et al. teach injecting a gas derived from raw smoke or partially purified smoke (Paragraph 22 of English translation) that is dissolved/dispersed in water, into a live tuna so that the smoke is processed by the circulatory system and heart (Paragraphs 24 and 25), and diffuses to all corners of the body, thereby providing the color and the taste of the fresh fish (Paragraphs 2-7, 12-13,15,62,63). Consequently, the smoke must super-purified by the water and/or membranes since it is processed through the fish via water and diffuses through the body, but does not affect negatively affect the taste of fresh fish, and respiratory system would be introduced to or exposed to the smoke because it is processed by the heart and circulatory system and diffuses through the entire fish. However, Yamaoka et al. are silent in teaching the gas diffuses a compound *through* the respiratory system and *into* the blood.

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33. With respect to a compound diffusing from the gas, Kowalski is relied on as evidence that smoke diffuses CO into the meat of tuna and it's the CO that reacts with the myoglobin to provide the smoke its able to maintain the color and taste of a fish (Column 2, line 66 to Column 3, line 3, Column 11, lines 20-Column 12, line and Column 15, lines 51-60).

34. limura also teaches preserving the color and taste of tuna by introducing water entrained with a gas through the respiratory and circulatory system of a live tuna that diffuses over the entire fish. However, limura teaches introducing the gas to a water tank holding the fish so that the gas is goes *through* the respiratory system and *into* the blood so the gas will be transported to the ends of the blood vessels and dispersed throughout the fish (Page 2 and Constitution of the invention on page 3 of English translation provided by Applicant). Therefore, it would have been obvious to modify Yamaoka et al. and supply the smoke *through* the respiratory system and *into* the blood, since limura teaches gas supplied to a water tank holding a fish will be transported to the ends of the blood vessels and dispersed throughout the body as required by Yamaoka et al. and this would offer improvements over the procedure of Yamaoka et al. in that (1) more than 1 fish can be treated at a time and (2) locating a desired location on the fish for injection is not required. One would have been substituting one method of introducing a gas into the blood stream of an alive fish for another for the same purpose: will be transported to the ends of the blood vessels and dispersed throughout the body.

Response to Arguments

35. Applicant's arguments, filed February 24, 2005, with respect to the rejections of Claims 1-11,14,17,20,24,25 under 35 U.S.C. 102(b) as being clearly anticipated by limura (JP61141835A), Claim 13 under 35 U.S.C. 103(a) as being unpatentable over limura (JP61141835A) further in view of Ishwata et al., and Claim 18 under 35 U.S.C. 103(a) as being unpatentable over limura (JP61141835A) further in view of Kowalski (US 5972401) have been fully considered. However, upon further consideration, new grounds of rejection are made as set for above.

Conclusion

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


37. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (571) 272-1402. The examiner can normally be reached on 7:00AM-3:30PM M-F.

39. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

40. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Madsen 
Examiner
Art Unit 1761

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